SANTA CRUZ BIOTECHNOLOGY, INC.

SCRN2 (G-15): sc-139286



BACKGROUND

The SCRN (Secernin) gene family has three vertebrate paralogs, i.e. SCRN1, SCRN2 and SCRN3, which are closely linked to human HOXA, HOXB and HOXD cluster, respectively. SCRN2 (secernin-2) is a 425 amino acid protein that belongs to the peptidase C69 family and the Secernin subfamily. Vertebrate SCRN genes showed a topology of the form (A)(BC), i.e. (Hsa2 Hsa7)(Hsa17), with SCRN2 falling outside the SCRN3-SCRN1 cluster. The SCRN2 gene is conserved in canine, bovine, mouse, rat and zebrafish, and maps to human chromosome 17q21.32. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Chromosome 17 is linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

REFERENCES

- 1. Way, G., et al. 2002. Purification and identification of secernin, a novel cytosolic protein that regulates exocytosis in mast cells. Mol. Biol. Cell 13: 3344-3354.
- 2. Welsch, M.J., et al. 2005. Birt-Hogg-Dubé syndrome. Int. J. Dermatol. 44: 668-673.
- 3. Suela, J., et al. 2007. Neurofibromatosis 1, and Not TP53, seems to be the main target of chromosome 17 deletions in *de novo* acute myeloid leukemia, J. Clin. Oncol. 25: 1151-1152.
- 4. Al-Dirbashi, O.Y., et al. 2007. Quantification of N-acetylaspartic acid in urine by LC-MS/MS for the diagnosis of Canavan disease. J. Inherit. Metab. Dis. 30: 612.
- 5. Murakami, N., et al. 2008. Novel deletion mutation in GFAP gene in an infantile form of Alexander disease. Pediatr. Neurol. 38: 50-52.
- 6. Abbasi, A.A. 2010. Unraveling ancient segmental duplication events in human genome by phylogenetic analysis of multigene families residing on HOX-cluster paralogons. Mol. Phylogenet. Evol. 57: 836-848.

CHROMOSOMAL LOCATION

Genetic locus: SCRN2 (human) mapping to 17q21.32; Scrn2 (mouse) mapping to 11 D.

SOURCE

SCRN2 (G-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SCRN2 of human origin.

PRODUCT

Each vial contains 100 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

SCRN2 (G-15) is recommended for detection of SCRN2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with SCRN1 or SCRN3.

SCRN2 (G-15) is also recommended for detection of SCRN2 in additional species, including equine and bovine.

Suitable for use as control antibody for SCRN2 siRNA (h): sc-93708, SCRN2 siRNA (m): sc-153273, SCRN2 shRNA Plasmid (h): sc-93708-SH, SCRN2 shRNA Plasmid (m): sc-153273-SH, SCRN2 shRNA (h) Lentiviral Particles: sc-93708-V and SCRN2 shRNA (m) Lentiviral Particles: sc-153273-V.

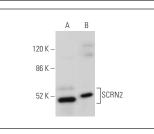
Molecular Weight of SCRN2: 47 kDa.

Positive Controls: mouse liver extract: sc-2256 or mouse pancreas extract: sc-364244.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



SCRN2 (G-15); sc-139286. Western blot analysis of SCRN2 expression in mouse liver (A) and mouse pancreas (B) tissue extracts

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.